No. 707,905. Patented Aug. 26, 1902.

C. F. CONOVER.

COOLER.

(Application filed May 15, 1902.)

(No Model.)

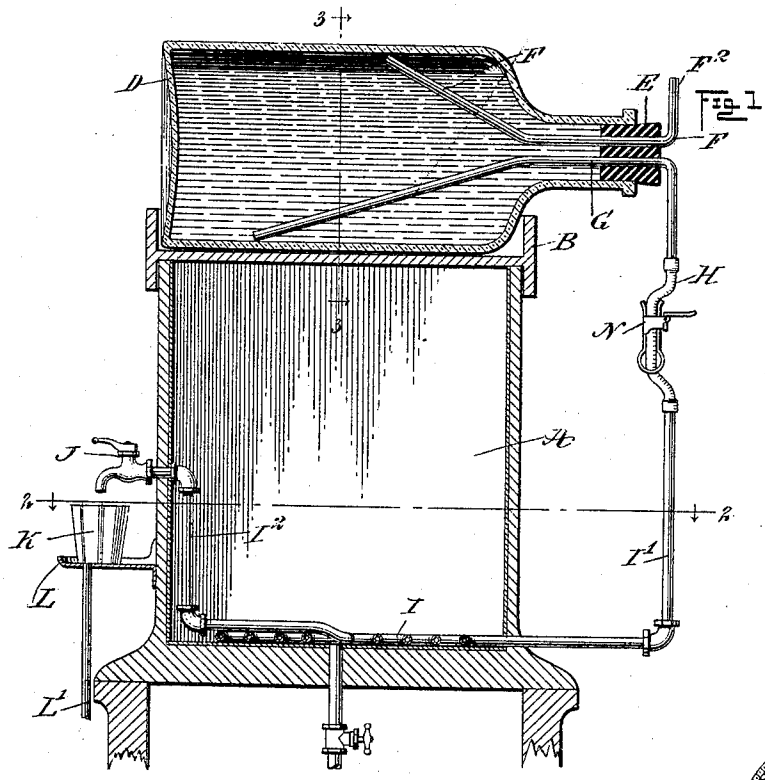


Fig. 1

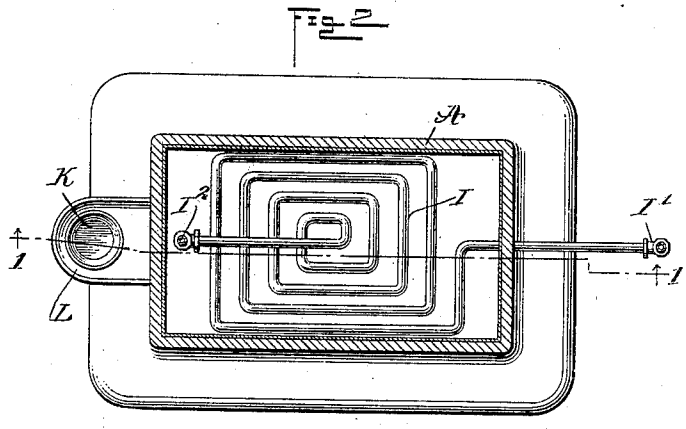


Fig. 2

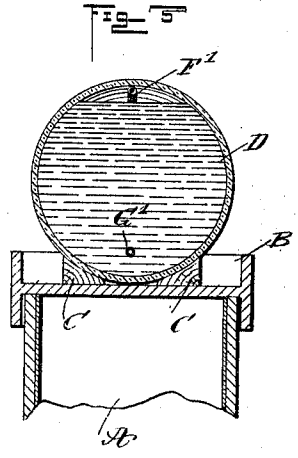


Fig. 5

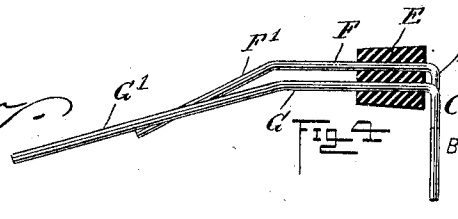


Fig. 4

WITNESSES:

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UNITED STATES PATENT OFFICE.

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COOLER.

SPECIFICATION forming part of Letters Patent No. 707,905, dated August 26, 1902.

Application filed May 15, 1902. Serial No. 107,399. (No model.)

To all whom it may concern:

Be it known that I, CHARLES F. CONOVER, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Cooler, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved cooler, more especially designed for cooling distilled aerated mineral waters and other liquids contained in glass receptacles, the cooler being arranged to permit of conveniently drawing the liquid from the liquid-containing receptacle as required and carrying it off without bringing it in direct contact with the cooling medium.

The invention consists of novel features and parts and combinations of the same, as will be more fully described hereinafter and then pointed out in the claims.

A practical embodiment of the invention is represented in the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a sectional side elevation of the improvement on the line 1 1 of Fig. 2. Fig. 2 is a sectional plan view of the same on the line 2 2 of Fig. 1. Fig. 3 is a transverse section of the same on the line 3 3 of Fig. 1; and Fig. 4 is a sectional side elevation of the stopper, the liquid-discharge pipe, and the air-vent tube in position for insertion into the containing-receptacle.

The box A, of suitable size and material, is adapted to contain ice or other cooling medium, and the top B of the box is provided with a support C, such as cleats, for supporting the receptacle D, containing the water or other liquid to be cooled, as hereinafter more fully described.

As shown, the receptacle D is a large glass bottle or demijohn resting with its side on the support C and provided with a removable stopper E, in which are held an air-vent tube F and a siphon-pipe G, the latter being connected by a flexible tube H with the outer end I' of a coil I, arranged in the bottom of the box A and having its inner end I^2 provided on the outside of the box with a faucet or other suitable drawing device J under the control of the user to draw the cooled liquid into a glass K or other vessel supported on a drip-pan L, attached to the outside of the box A and provided with a drain-pipe L'.

As shown in Figs. 1 and 4, the air-vent tube F has its inner and outer ends F' and F^2 standing at angles to the middle portion, which is mounted to turn in the stopper E to allow of bringing the vent-tube F into the position shown in Fig. 4 to permit convenient insertion of the tube F and pipe G into the receptacle D, and when the stopper E is in position on the mouth of the receptacle and the latter is placed on the support C, as indicated in Figs. 1 and 3, then the tube F is given a half-turn, so as to bring the ends F' and F^2 into an uppermost position to allow air to pass from the outside to the inside of the receptacle D above the level of the liquid contained therein. When the vessel D is placed in position on the support C, then the outer end of the siphon-pipe G is connected with the flexible tube H, while the inner end of the said siphon-pipe extends to the bottom of the receptacle D, so that the liquid in the vessel can flow by the siphon action of the pipe G through the latter and flexible connection H into the coil I to be cooled therein by the cooling medium contained in the box A. Now when the user opens the drawing device J it is evident that the cooled liquid flows from the coil I into the vessel K, as the drawing device is a distance below the bottom of the receptacle D, containing the liquid siphoned out by the pipe G, as before described.

The flexible connection H is preferably provided with a closing device N to close the said flexible connection whenever the latter is disconnected from the end of the siphon-pipe G at the time the empty receptacle D is replaced by a filled one.

It is understood that after a receptacle D is placed in position on the support and the pipe F is moved in position and the pipe G connected with the coil then the siphon action of the pipe G begins at once, as the level of the liquid in the receptacle is above the highest point of the siphon-pipe, and the liquid thus flows from the said receptacle into and through the coil I to be drawn therefrom as required.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A cooler comprising a box, a cooling-coil therein, a receptacle, a stopper insertible in said receptacle, a siphon-pipe having a length arranged horizontally in said receptacle and inclined lengthwise thereof to a point close to the bottom of the same, said siphon-pipe extending through the stopper and communicating with the cooling-coil, and a vent-pipe extending through the stopper and inclined upwardly within said receptacle, the outer end of said vent-pipe being normally open for the free ingress of air to the upper part of the receptacle.

2. A cooler comprising a box, a cooling-coil therein, a support C on the top of the casing, a receptacle placed horizontally on the support, a stopper in the mouth of the receptacle, a siphon-pipe having an inclined length disposed within the receptacle and extended through the stopper, a flexible tube connecting the outer end of the siphon-pipe and the cooling-coil, a closing device on the flexible tube to compress the latter and cut off communication between the siphon-pipe and the cooling-coil, and a vent-pipe extending through the stopper and into the receptacle and having a normally open outer end.

3. A cooler comprising a box, a cooling-coil therein, a receptacle, a stopper for said receptacle, a siphon-pipe connected to said coil and extended through the stopper into the receptacle, and a vent-tube revolubly fitted in the stopper and having an inclined length within the receptacle and a normally open outer end, said vent-tube being adjustable in the stopper to bring its inclined length into close relation to a length of the siphon-pipe.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES F. CONOVER.

Witnesses:
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CHAS. A. HOLMES.